

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : Boon-Lock YEO

Group Art Unit: 2617

Appln. No. : 09/670,865

Examiner: RAMAN, Usha

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For : SUMMARY FRAMES IN VIDEO

Commissioner for Patents
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Alexandria, VA 22314

SUBMISSION UNDER 37 C.F.R. §1.114

Sir:

In response to the Final Office Action dated January 11, 2006, Applicants respectfully request reconsideration of the application in view of the following Amendments and Remarks submitted under 37 C.F.R. §1.114.

A listing of claims is set forth on pages 2-7.

Remarks begin on page 8.

If extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. §1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to Deposit Account No. 50-0510.

AMENDMENT TO THE CLAIMS

Please **AMEND** claims 21, 25, 30, 33, and 36 as follows.

A copy of all pending claims and a status of the claims is provided below.

1. - 20. (Cancelled)

21. (Currently Amended) A video viewing system, comprising:

means for selecting a programming channel containing video program in progress;

a display screen for viewing ~~a full-screen display of~~ a video program in progress;
and

at least one summary frame also displayed on said display screen along with said video program in progress at a same time when said programming channel is changed ~~selected~~, said at least one summary frame comprising a past frame from said video program in progress.

22. (Previously Presented) A video viewing system as recited in claim 21 wherein said at least one summary frame displays a video segment on said viewing screen corresponding to said summary frame.

23. (Previously Presented) A video viewing system as recited in claim 21 comprising a plurality of said summary frames each corresponding to a past frame from said video program in progress.

24. (Previously Presented) A video viewing system as recited in claim 21 further comprising at least one preview frame comprising a future frame from said video program in progress.

25. (Currently Amended) A user interactive video viewing system, comprising:
a display screen for viewing ~~a full-screen display of a video program;~~
at least one summary frame displayed on said display screen at a same time with said video program when a programming channel is changed, said at least one summary frame comprising one of a past or future frame from said video program;
a control means for allowing a user to change said video program and for allowing said user to select said at least one summary frame to play at least a segment of said video program corresponding to said selected summary frame.

26. (Previously Presented) A user interactive video viewing system as recited in claim 25 wherein said viewing system comprises a television system.

27. (Previously Presented) A user interactive video viewing system as recited in claim 26 wherein said summary frames remain on said display screen when said video program is preempted.

28. (Previously Presented) A user interactive video viewing system as recited in claim 26 wherein the user can delete said summary frames from said display screen.

29. (Previously Presented) A user interactive video viewing system as recited in claim 25 wherein said viewing system comprises client connected to a server.

30. (Currently Amended) A method for informing a viewer of the content of a video program in progress, comprising the steps of:

selecting a plurality of summary frames depicting selected events from ~~said video~~
said video program;

embedding said summary frames in said video program;

transmitting said video program comprising said summary frames over a media
and

displaying said video program and said summary frames on a screen at a same
time with said video ~~programs-program~~ when a viewer selects-changes to said video
program, ~~wherein said video program is displayed full screen.~~

31. (Previously Presented) A method for informing a viewer of the content of a video program in progress as recited in claim 30, further comprising the steps:

displaying a video segment corresponding to a particular summary frame when said summary frame is selected by a viewer; and
resuming said video program when said video segment has finished.

32. (Previously Presented) A method for informing a viewer of the content of a video program in progress as recited in claim 30, comprising the step of continuing to display said summary frames when said video program is preempted.

33. (Currently Amended) A method for informing a viewer of the content of a video program in progress ~~as recited in claim 30, further comprising the steps of:~~

selecting a plurality of summary frames depicting selected events from said video program;

embedding said summary frames in said video program;

transmitting said video program comprising said summary frames over a media;

simultaneously displaying said video program and said summary frames on a screen when a viewer selects said video program;

writing selected frames from said selecting step only in a row direction of a table;
and

reading said selected frames from said table only in a column direction to interleave said summary frames displayed on said screen.

34. (Previously Presented) A method for informing a viewer of the content of a video program in progress as recited in claim 30 wherein said step of displaying said video program comprising said summary frames on a screen comprises placing said video program and said summary frames in designated windows on said screen.

35. (Previously Presented) A method for informing a viewer of the content of a video program in progress as recited in claim 30 wherein said video program and said video program in progress are on different channels

36. (Currently Amended) A video viewing system, comprising:
means for selecting a programming channel containing video program in progress;
a display screen for viewing ~~a full screen display of a~~ video program in progress;
and
at least one summary frame also displayed on said display screen along with said video program in progress at a same time when said programming channel is changed selected, said at least one summary frame comprising a past frame from said video program in progress, ~~[[; and.]]~~
~~a plurality of said~~ at least one summary frames ~~each frame~~ corresponding to a past frame from said video program in progress; and

at least one preview frame comprising a future frame from said video program in progress,

wherein said at least one summary frame displays a video segment on said viewing screen corresponding to said at least one summary frame.

REMARKS

Claims 21-36 are currently pending in the application. By this amendment, claims 21, 25, 30, 33, and 36 are amended for the Examiner's consideration. The above amendments do not add new matter to the application and are fully supported by the specification. For example, support for the amendments is provided at Figures 13 and at pages 3, 5-7, and 13-14 of the specification. Reconsideration of the rejected claims in view of the above amendments and the following remarks is respectfully requested.

Telephone Interview

Applicants wish to thank Examiners Raman and Kelley for their courtesy and cooperation during the telephone interview conducted on March 15, 2006. In the interview, Applicants' representatives and the Examiners discussed the outstanding rejections of claims 21-36 and the applied art (e.g., U.S. Pat. No. 6,732,369 issued to Schein, U.S. Pat. No. 5,815,145 issued to Matthews, and U. S. Patent No. 5,926,230 issued to Nijima). The Examiners indicated that the above amendments to independent claims 21, 25, 30, and 36 would overcome the rejections under 35 U.S.C. §§102 and 103 based upon Schein. The Examiners further indicated that elimination of the recitation "a full screen display" would overcome the rejections under 35 U.S.C. §112, First Paragraph. The Examiners further indicated that claim 33 would be

allowable over the applied art if re-written in independent form and amended as presented above.

35 U.S.C. §112 Rejection

Claims 21-36 were rejected under 35 U.S.C. §112, 1st paragraph. This rejection is respectfully traversed.

While Applicants do not agree with the rejection, independent claims 21, 25, 30, and 36 have, nevertheless, in order to advance prosecution, been amended to omit recitations regarding a full screen display.

Accordingly, Applicants respectfully request that the rejection over claims 21-36 be withdrawn.

35 U.S.C. §102 Rejection

Claims 21, 23-24, 30, 32, and 34-35 were rejected under 35 U.S.C. §102(e) for being anticipated by U. S. Patent No. 6,732,369 issued to Schein et. al. ("Schein"). This rejection is respectfully traversed.

To anticipate a claim, each and every element as set forth in the claim must be found, either expressly or inherently described, in a single prior art reference. MPEP §2131. Applicants submit that the references supplied by the Examiner do not show each and every feature of the claimed invention.

The instant invention is generally related to placing summary frames in a video and, more particularly, to a system for placing summary frames in a currently playing

video depicting either past or future scenes of the video so that a viewer can get a quick overview of the video. By way of non-limiting example, implementations of the invention provide a system and method whereby when a channel surfer (e.g., a viewer that is frequently changing channels) arrives at a new channel, rather than only having what is currently playing to catch the eye, summary frames are also available to catch the surfer's attention and aid in understanding the programming. Specifically, independent claim 21 recites, in pertinent part:

... at least one summary frame also displayed on said display screen along with said video program in progress at a same time when said programming channel is changed, said at least one summary frame comprising a past frame from said video program in progress.

Similarly, independent claim 30 recites, in pertinent part:

... selecting a plurality of summary frames depicting selected events from said video program ...
... displaying said video program and said summary frames on a screen at a same time with said video program when a viewer changes to said video program.

Applicants respectfully submit that Schein does not contain these feature and, therefore, does not anticipate the claimed invention.

Instead, Schein shows a television schedule system in FIGS. 16-21. The system includes a program guide 502 which includes a number of screen information areas or windows in a particular screen where the viewer operates a input device, such as a remote control, to move around vertically and horizontally and to interact with that screen area's function. Within each screen area are one or more items, typically

arranged in a matrix or grid so that the viewer can scroll through the grid to select or activate items within the grid (col. 22, lines 1-10). The program guide 502 may contain a summary frame. The program guide 502 is accessed from a currently tuned program by clicking on the remote control device (FIGS. 17A-17C; col. 23, lines 20-30). As such, Schein discloses that the program guide 502, and thus any summary frame, is accessed while watching a current program and then using the remote control device to activate the program guide while still tuned to that same current program. Schein does not disclose that the program guide, and any associated summary frame, is displayed along with the current program at a same time when the channel is *changed*, as recited in the claimed invention. Accordingly, Schein does not disclose *at least one summary frame also displayed on said display screen along with said video program in progress at a same time when said programming channel is changed*, as recited in claim 21. Moreover, Schein does not disclose *displaying said video program and said summary frames on a screen at a same time with said video program when a viewer changes to said video program*, as recited in claim 30. Therefore, Schein does not contain each and every element of claims 21 and 30, and does not anticipate claims 21 and 30 and dependent claims 23, 24, 32, 34, and 35.

Accordingly, Applicants respectfully request that the rejection over claims 21, 23-24, 30, 32, and 34-35 be withdrawn.

35 U.S.C. §103 Rejections

Claims 22, 25-29, 31, and 36 were rejected under 35 U.S.C. §103(a) for being unpatentable over Schein in view of U. S. Patent No. 5,815,145 issued to Matthews, III ("Matthews"). Claim 33 was rejected under 35 U.S.C. §103(a) for being unpatentable over Schein in view of U. S. Patent No. 5,926,230 issued to Nijima et al. ("Nijima"). These rejections are respectfully traversed.

The Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP §2142. Applicants submit that the references supplied by the Examiner do not teach or suggest every feature of the claimed invention.

Claim 31

Applicants respectfully submit that claim 31 depends from allowable independent claim 30, and is allowable by virtue of the allowability of the independent claim.

Accordingly, Applicants respectfully request that the rejection over claim 31 be withdrawn.

Claims 25-29 and 36

Independent claim 25 recites, in pertinent part:

... at least one summary frame displayed on said display screen at a same time with said video program when a programming channel is changed, said at least one summary frame comprising one of a past or future frame from said video program ...

Similarly, independent claim 36 recites, in pertinent part:

... at least one summary frame also displayed on said display screen along with said video program in progress at a same time when said programming channel is changed, said at least one summary frame comprising a past frame from said video program in progress, said at least one summary frame corresponding to a past frame from said video program in progress ...

Applicants respectfully submit that Schein and Matthews do not teach or suggest these features.

As described above, Schein does not disclose at least one summary frame displayed on a display screen at a same time with a video program when a programming channel is changed. Matthews does not compensate for the deficiencies of Schein. Instead, Matthews shows an interactive program guide 100 comprising multiple tiles 102 that correspond to different channels. A user may use remote control 20 to navigate the guide 100 to play selected video clips from selected ones of the tiles 102. (FIG. 4; col. 4 – col. 5). However, each of the tiles 102 corresponds to a different channel. Matthews does not disclose a video program and a summary frame of that same video program being displayed on the screen at the same time, much less, a

video program and a summary frame of that same video program being displayed on the screen at the same time when a programming channel is changed, as recited in the claimed invention. Therefore, Schein and Matthews do not teach or suggest every element of claims 25 and 36. Therefore, claims 25 and 36, and dependent claims 26-29, are not obvious over Schein and Matthews.

Accordingly, Applicants respectfully request that the rejection over claims 25-29 and 36 be withdrawn.

Claim 33

Independent claim 33 recites, in pertinent part:

... writing selected frames from said selecting step only in a row direction of a table; and
... reading said selected frames from said table only in a column direction to interleave said summary frames displayed on said screen.

Applicants submit that Schein and Nijjima do not teach or suggest these features.

As already described, Schein shows a program guide that may include a summary frame. However, Schein does not disclose writing selected frames from a selecting step only in a row direction of a table and reading the selected frames from the table only in a column direction to interleave the summary frames displayed on the screen, as recited in the claimed invention. Nijjima does not compensate for the deficiencies of Schein. Instead, Nijjima shows an electrical program guide (EPG) where a plurality of screens for program selection are displayed. The EPG comprises a monitor apparatus 4 that displays a reduced picture elements and a cursor 201 (FIG.

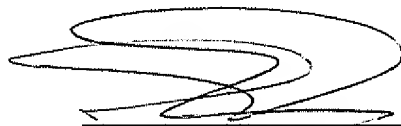
20). A user may use a remote control to scroll the cursor through the reduced picture elements (line 23 of col. 21 through line 44 of col. 22). However, Nijima does not disclose writing selected frames from a selecting step only in a row direction of a table and reading the selected frames from the table only in a column direction to interleave the summary frames displayed on the screen, as recited in the claimed invention. Therefore, Schein and Nijima, alone or in combination, do not teach or suggest every element of claim 33.

Accordingly, Applicants respectfully request that the rejection over claim 33 be withdrawn.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicants hereby make a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-0510.

Respectfully submitted,
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